

What Is Claimed Is:

1. A water temperature sensor comprising:  
a temperature measuring part for measuring a temperature of water; and  
a hollow chamber cap located at the bottom edge of a water gauge chamber  
5 within a washing machine, having a seating portion on a predetermined place for  
installing the temperature measuring part.
2. The water temperature sensor of claim 1, further comprising a heat insulating  
material inserted into a hollow space thereof to achieve an adiabatic effect and to fasten  
10 said temperature measuring part within said chamber cap.
3. A water temperature sensor comprising:  
a temperature measuring part including a temperature detecting sensor for  
measuring the temperature of water, and signal lines for connecting the temperature  
15 detecting sensor with a circuit requiring the measured value; and  
a hollow chamber cap located at the bottom edge of the water gauge chamber,  
having a recess underneath the top surface thereof to mount the temperature measuring  
part within the hollow chamber cap, so that the water temperature is measured without  
directly contacting with water.  
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4. The water temperature sensor of claim 3, further comprising a heat insulating  
material inserted into a hollow space thereof to achieve an adiabatic effect and to fasten  
said temperature measuring part within said chamber cap.
- 25 5. A water temperature sensor comprising:

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a temperature measuring part including a temperature detecting sensor for measuring the temperature of water, signal lines for connecting the temperature detecting sensor with a circuit requiring the measured value, and a cylindrical probe containing the temperature detecting sensor and the signal lines; and

5 a hollow chamber cap, located on the bottom edge of the water gauge chamber, having a hole at the center thereof so that the cylindrical probe of the temperature measuring part is directly contacted with the washing water after penetrating the hole.

6. The water temperature sensor of claim 5, further comprising a heat insulating material inserted into a hollow space thereof to achieve an adiabatic effect and to fasten said temperature measuring part within said chamber cap.

7. A washing machine comprising:  
15 an outer tube of a washing machine;  
a drain connector connected to said outer tub;  
a valve connected to said drain connector, for opening and closing by a motor;  
and

a sensor installed between said outer tub and the upper side of said valve, for  
20 directly measuring the temperature of washing water collected upstream of said valve when said valve is closed.